## Hood Canal is a fragile fjord



Because of its long, narrow shape, great depths, and a shallow sill at the north end, the canal's waters have a history of low oxygen levels. Oxygen levels typically drop in the canal during the summer and fall. In the past few years, oxygen levels from Hoodsport to Belfair have dropped to historic lows and have remained low throughout the year.

In the fall of 2003, oxygen levels plummeted. Deep-water

rockfish and spot shrimp moved into the shallow waters, desperate for oxygen. Dead fish, shrimp and other animals washed up on the beaches. Scientists believe more than 50,000 marine organisms died during this extremely low dissolved oxygen period.

# Help for Hood Canal

Government agencies, community groups and state universities are monitoring conditions in Hood Canal to help people understand the degree to which this problem is natural or human caused, and to determine what needs to be done to raise oxygen levels.



In May 2004, the Puget Sound Action

Team and Hood Canal Coordinating Council completed a study that showed that human activities put between 100 to 300 tons of nitrogen into the canal every year. The report recommended ways to keep or reduce the main sources of nitrogen pollution from entering the canal.

The Action Team is working with Hood Canal communities to reduce nitrogen from human sewage, stormwater runoff, agriculture, hatchery operations, forestry and sewage treatment plant discharges.

#### What you can do to help

Nitrogen is a naturally occurring element that can upset the balance of nature if present in excess. Sewage, farm waste and fertilizers all contain nitrogen compounds that can wash into Hood Canal and cause huge blooms of plant plankton. When the blooms die and decompose, they pull oxygen out of the water. Fish and other marine life are displaced, stressed or may even suffocate as the low oxygen zones spread.

**Don't feed nutrients to the canal.** By keeping nutrients out of the canal and streams and groundwater that feed into it, you can do your part to keep oxygen levels from getting worse.

Keep your septic system in top working order. Have it inspected regularly and get your tank pumped when needed. Ideally, install a system that treats nitrogen along with bacteria. For tips on how to care for your septic system, visit the Washington Sea Grant Web site at <a href="http://www.wsg.washington.edu/outreach/mas/waterquality/septicsense/1sensemain.html">http://www.wsg.washington.edu/outreach/mas/waterquality/septicsense/1sensemain.html</a>.

**Use fertilizer sparingly or preferably not at all.** Don't throw yard waste in streams or Hood Canal. The WSU Master Gardener Web site at <a href="http://gardening.wsu.edu/stewardship/stewgard.htm">http://gardening.wsu.edu/stewardship/stewgard.htm</a> has landscape tips.

**Manage stormwater runoff.** Runoff can pick up nutrients from fertilizers and pet waste and deliver them to the canal. Leave trees and native plants along the banks of the canal or streams. For tips on stormwater management, visit

http://www.psat.wa.gov/Publications/LIDstudiesLIDapproaches.htm.

**Keep pet waste out of the canal.** Double bag pet waste and put it in the trash.

**Keep cow and horse manure out of the canal.** For assistance, contact your local conservation district at <a href="http://www.scc.wa.gov/districts/list/">http://www.scc.wa.gov/districts/list/</a>.

**Grow shellfish.** Shellfish are filter feeders that remove plankton from the water. For a list of resources about shellfish, visit <a href="http://www.psat.wa.gov/Programs/shellfish/Shellpubs.htm">http://www.psat.wa.gov/Programs/shellfish/Shellpubs.htm</a>.

**Properly dispose of sewage from boats.** Use pump-out stations for sewer waste and don't throw bait overboard. Visit the Parks and Recreation Commission's Web site for a map of pump-out stations.

### **Keep Informed**

For more information, visit the Action Team's web page about Hood Canal: <a href="http://www.psat.wa.gov/Programs/hood\_canal.htm">http://www.psat.wa.gov/Programs/hood\_canal.htm</a>.

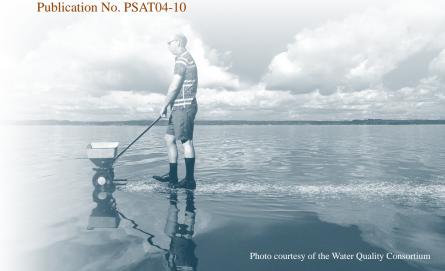
Call the Action Team at (800) 54-SOUND to receive information on ways to reduce pollution from specific nutrient sources.

Join the Action Team's general information list serv to get updates about Puget Sound and Hood Canal: <a href="http://www.psat.wa.gov/Site">http://www.psat.wa.gov/Site</a> index/listserv.htm.

For the latest monitoring information from the canal, visit the University of Washington's Web site at <a href="http://www.prism.washington.edu/hcdop/index.html">http://www.prism.washington.edu/hcdop/index.html</a>.

Contact the Neighbors of the Hood Canal at (360) 275-4898 and the Hood Canal Salmon Enhancement Group at (360) 275-3575, <a href="http://www.hcseg.com/">http://www.hcseg.com/</a> to learn about volunteer opportunities.

If you need this publication in an alternative format, contact (800) 833-6388.
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## Hood Canal needs your help!

In the spring of 2002 and fall of 2003, dead fish and other marine life washed up on Hood Canal beaches. Scientists have seen oxygen levels drop to all time lows.

Hood Canal is one of the most productive and scenic marine environments in the world. The canal has long been renowned for its excellent commercial and sport fishing and shellfish harvesting. Boaters, divers, birdwatchers and hikers are attracted to its natural beauty and recreational opportunities.

To protect the marine life in Hood Canal, we need to act now. Whether you live near the canal or it's a favorite place to visit, Hood Canal needs your help.

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Hood Canal is in trouble and needs your help.

